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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/193,482 11/17/98 WESTBY

J 934.008US1

EXAMINER

LM02/0926

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P
ATTN: PAUL L. MAEYAERT
P.O. BOX 2938
MINNEAPOLIS MN 55402

DU, T

ART UNIT

PAPER NUMBER

2782

DATE MAILED:

09/26/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/193,482

Applicant(s)

WESTBY ET AL.

Examiner

Thuan N. Du

Art Unit

2782

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 1998.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-17 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 7-8, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admission of prior art [AAPA], and Pritty et al. (U.S. Patent No. 4,819,229).

4. As per claims 1, 7-8, and 16-17, AAPA teaches a communications channel system comprising:

a first channel node having a first port and a second port, each port supporting a fibre-channel arbitrated-loop serial communications channel, wherein each one of the ports arbitrates for control of that port's attached communications channel [Application's specification, p. 4, lines 5-18].

An arbitration apparatus arbitrates for control of a loop of the communications channel [Application's specification, p. 3, lines 27-30].

AAPA does not teach the arbitration-and-control apparatus maintains control of the communications channel as long as a predetermined amount of data is available within control of the channel node.

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Pritty et al. teaches an interrupt system wherein the interruption depends on the amount of untransmitted data. In other word, the interrupt will be ignored (maintain control of the communications channel) as long as a predetermined amount of data is available for transmission [col. 7, lines 20-32].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of AAPA and Pritty et al. because they both teach a system to arbitrate the control of the communications channel. Pritty et al.'s teaching of maintaining control of the communications channel as long as a predetermined amount of untransmitted data is available would increase the flexibility and reduce the arbitrated loop overhead by allowing AAPA system to keep controlling the communications channel if a predetermined amount of data is available.

5. Claims 2-6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admission of prior art [AAPA], Pritty et al. (U.S. Patent No. 4,819,229), and Birns et al. (U.S. Patent No. 6,012,128).

6. As per claims 2-6, and 9, AAPA-Pritty et al. teaches a system having an on-chip data buffer, wherein the predetermined amount of data includes a predetermined amount of on-chip data within the on-chip data buffer [col. 7, lines 23-29]. AAPA-Pritty et al. does not disclose an off-chip memory.

Birns et al. teaches a system having an on-chip memory [Fig. 1, static RAM 80] and an off-chip memory [Fig. 1, data memory 20 and/or instruction memory 18].

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It would have been obvious to one of ordinary skill in the art to combine the teachings of AAPA-Pritty et al. and Birns et al. because it would increase the flexibility of AAPA-Pritty et al.'s system by using the two memories alternately.

Furthermore, Pritty et al. teaches the predetermined amount of data is programmable [col. 7, lines 24-28]. Therefore, it would have been obvious to set the predetermined amount of off-chip data is a different amount than the predetermined amount of on-chip data.

7. As per claims 10-15, AAPA, Pritty et al. and Birns et al. together teach the claimed apparatus. Therefore, AAPA, Pritty et al. and Birns et al. together teach method steps of the claimed apparatus.


Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuan N. Du whose telephone number is (703) 308-6292. The examiner can normally be reached on Monday-Friday: 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on (703) 305-9717. The fax phone number for the organization where this application or proceeding is assigned is (703) 306-5404.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Thuan N. Du
September 22, 2000


THOMAS C. LEE
SUPERVISOR/PATENT EXAMINER